Corridor Working Group Meeting – Meeting Summary

March 21, 2006
1:30 – 3:30 p.m.
WSDOT Kent Maintenance Center
26620 68th Avenue South, Kent 98032

Attendees:

WSDOT
Susan Everett
Carol Hunter
Thomas Noyes
Mike Sallis
Dick Gersib
Ron Landon

King County
Ann Martin

Perteet
Michael Booth
Jeff Lundstrom

City of Kent
Steve Mullen

City of Sumner
Bill Shoemaker

City of Auburn
Dennis Dowdy
Roger Thordarson

EnviroIssues
Kristine dos Remedios

City of Renton
Peter Hahn

Port of Tacoma
Dick Dorsett

PSRC
Mike Cummings

Welcome and Introductions

Carol Hunter, WSDOT

Carol Hunter, WSDOT, welcomed the group and thanked them for coming. She introduced Susan Everett who has been asked to be the general WSDOT project manager for all projects on SR 167. Perteet has also been hired as the general engineering contractor (GEC) for all SR 167 projects, in an effort to get all of the corridor projects under one management team.

Approve February 21st Meeting Summary

Carol Hunter, WSDOT

Copies of the February 21st meeting summary were given to the partners at the meeting. Carol asked for comments on the summary and there were none.

Watershed Characterization Study

Carol Hunter, WSDOT

Carol introduced Dick Gersib who worked on the Watershed Characterization Study of the area surrounding the SR 167 corridor. Dick was invited to the meeting to present the study and use its results to handle wetland and stormwater issues for projects along SR 167.

Dick passed out copies of the slides he was going to present. The presentation includes three major parts: the watershed characterization study and results, WSDOT's initial efforts to identify wetland bank opportunities within WRIA 9, and new alternatives for stormwater control.

In the past, WSDOT was focused on meeting regulatory requirements, but that did not necessarily focus project mitigation on environmental benefits. It is now WSDOT's goal to find the biggest environmental benefit for each taxpayer dollar spent, which was not necessarily accomplished by focusing on mitigation requirements. In order to do this, WSDOT needed to identify areas where wetland restoration, preservation, and creation are most appropriate and create the best environmental benefits.

The department found that restoring natural wetlands had a high environmental benefit with relatively low cost and low risk. Preserving existing wetland sites has a low environmental benefit with relatively high costs but low risks. Creating a wetland provides a high environmental benefit but with very high costs and high risks.

Traditionally, the regulatory process enforced and evaluated the success of wetland sites on the site scale. In order to evaluate potential restoration sites and maximize the environmental benefits of mitigation work, it is important to look at the landscape scale, which shows how that individual site functions as a part of a larger watershed system. At this level, environmental factors such as ecological processes and how development is changing how water is delivered to a system and moves through a system are evaluated. That was the goal and purpose of the Watershed Characterization Study.

Almost 5000 sites were identified within the 350 square mile study area. The sites were evaluated for restoration potential. All of the sites that qualified as sites for potential restoration were ranked based on how much environmental benefit they would generate if restored. WSDOT can use these results to target their project mitigation efforts where it is most affective.

Dick shared a map of the identified sites within the 167 corridor, which were color coded to show the wetlands that were currently not properly functioning, at risk or properly functioning. All of the data sets were provided to the CWG members on a CD and the WSDOT Web site has an electronic copy of the report available.

Discussion:

- Ann Martin said if there is development pressure, and a wetland is at risk for being lost, then the environmental benefits of preserving that wetland is much higher than portrayed in the presentation. Dick agreed that it is best to preserve natural systems in place, but in areas where natural systems have been altered, restoration of previous wetland sites has the highest environmental benefit with the lowest cost and highest risk of success.

- Ann said that it is important to look at the corridor that flows through all of the wetland systems between urban, suburban and rural areas.
- Dick Gersib said that the study was not able to look at heat loads in the system. No data was available for the team to run a model on heat. The team used NOAA and FHWS indicators to determine what areas within WRIA 9 and 10 properly function, are at risk, or are not properly functioning.
- Ann asked what large wood was. Dick said that it was woody debris that is recruited into a water system through water flow.
- Carol Hunter said that this study will provide the project management team with a list of mitigation opportunities. All projects within the corridor can use this information, instead of the 20-year-old information that was previously available. As the team looks at the one lane and two lane options for SR 167, it can get an idea of the mitigation required for these improvements. WSDOT recognizes that it has made decisions in the past to meet regulatory requirements, but have not created any environmental benefits. This study will serve as a tool to advance WSDOT's mitigation approach to create more environmental benefits through mitigation, and also control short- and long-term costs of mitigation.

Dick then moved on to explain how the characterization study could be used to explore wetland mitigation bank opportunities within WRIA 9. The WRIA 10 portion of the SR 167 study area has yet to be evaluated.

The study was done on the landscape scale, and because of this, a site scale assessment will still need to be done on every potential mitigation bank site identified. The study identified 28 candidate bank sites and through the assessment, 3 were eliminated as potential sites.

All sites in the database are ranked by environmental benefit and potential to replace functions lost. Susan Everett noted that this new systematic and scientific approach to identify mitigation banks will help bank sites stand up through the scrutiny of the permitting process.

Discussion:

- Mike Sallis asked how monitoring would be done for a wetland bank. Dick said that Ecology or the local jurisdiction will require the monitoring, but the study does not evaluate that.
- Bill Shoemaker said that he thought that monitoring is required for up to 10 years now. Susan Everett agreed, saying that monitoring is required for at least 10 if not 20 years. However, after 10 years, it is clear if a wetland restoration site has been successful or not.
- Mike Sallis asked if Ecology would look at other indicators besides the factors outlined in the functioning condition matrix. Dick said that all of that information would be used as a negotiations point when establishing a bank instrument with Ecology. Susan Everett clarified that a bank instrument is

an agreement between the party that owns the mitigation bank and the regulatory agency that gives the credits.

- Ann Martin asked if the reason you can not have the Stage 4/5 HOV lane use this study for their mitigation requirements is a mitigation bank would take too long to set up, and may hold up the project. Susan said yes, because it takes a long time to get an instrument set up.

Dick then discussed how the Watershed Charactization Study can be used to identify alternative stormwater flow control options for the SR 167 corridor. Vaults or detention ponds that have been used in the past represent missed opportunities to create more viable and environmentally beneficial options for stormwater flow control.

When new pavement is added to a highway, WSDOT needs to mitigate for the new runoff from that facility. There are two options: create or design a storage facility or look at where natural systems have historically retained and treated stormwater, and mimic that. The storage facilities do control the quality and quantity of water in a system, but they do not create any environmental benefits. Wetland restoration also controls the quality and quantity of water in a system with environmental benefits.

Therefore, where possible, the latter option should be implemented, especially in areas where conventional flow options are not going to work or are cost prohibitive. Where this is the case, it is important to identify restoration options upslope of the stormwater outfall, stormwater retrofit sites upslope of the new facility, and other opportunities, and then model the flow control potential to measure the stormwater control benefits.

Discussion:

- Ann Martin asked if you are using a wetland for water control and water quality, during peak rainfall events, a wetland would be overwhelmed because it is not used to accommodating the additional runoff generated by the new facility as well as a peak rainfall event. Dick said that the team would measure duration and flow of the water flow and not capacity. Mitigation would be targeted upslope so downslope wetlands would not be overwhelmed.
- Bill Shoemaker said that Sumner is also trying to get away from costly detention projects as well. It is important to find ways to reduce impervious surface and encouraging low-impact development.
- Ann Martin asked if part of the effort was to maintain stream flow throughout the season, which involves getting cooler water through the system from upstream. Dick said yes, that it is important to increase the groundwater recharge in order to increase base flow.
- Susan Everett asked if the idea is to build wetlands to become both detention and treatment facilities that absorb a lot of water in the winter and

release water in the summer. Dick said yes. The first option is to always work with the natural system and then turn to created wetlands if necessary, but that also provide fish habitat and detention upstream.

- Susan Everett asked if the team was working with the local tribes on this strategy. Mike Sallis said yes, that the tribes have been involved, specifically Karen Walters from the Muckleshoot Tribe.
- Dennis Dowdy noted that Ecology also wants the jurisdictions to do some pollution control down stream. Dick agreed and said that stormwater engineers feel comfortable that treating water quality in shoulders or a ditch is still adequate, but stormwater quantity is the major issue along this corridor.
- Carol Hunter said that Perteet is going to work on getting a grasp on the wetland impacts for the one lane and two lane options for SR 167. At the next meeting they will report on these numbers so the CWG members can get an understanding of the mitigation issues for all options.
- Mike Sallis and Carol will discuss next steps with each jurisdiction.
- Susan Everett also noted that the team will need to look into potential mitigation sites and determine the kind of restrictions are on each site, including sites that are eligible for tax benefits to remain agricultural, or sites that are zoned agricultural.
- Ann Martin suggested that the team talk to Cathy Creahan to discuss agricultural district issues for potential mitigation sites.

Next Meeting: 4/18/06, 1:30 – 3:30 p.m.
WSDOT Kent Offices
21851 84th Avenue South
Kent, WA 98032